$p(A\|B)=\frac{p(A\cap B)}{p(B)}$	**$\Omega=\sum_{i=1}^n B_i , p(A)=\sum_{i=1}^n p(A\cup B_i)=\sum_{i=1}^np(A\|B_i)p(B_i)$**

$A,B-indep<=>p(A\cap B)=p(A)p(B)$	**$p(A\|B)=\frac{p(B\|A)p(A)}{p(B)}$**

$A,B-incop<=>p(A\cap B)=0$	**$M(x)=\sum_{i=1}^n x_i p_i$**	**$F_\xi(x)=p(\xi<x)$**

$p(B_i\|A)=\frac{p(A\|B_i)p(B_i)}{\sum_{i=1}^n p(A\|B_i)p(B_i)}$	**$Var(x)=M(x^2)-M(x)^2$**	

$Cov(X,Y)=E\big[(X-EX)(Y-EY)\big]=E[XY]-(EX)(EY)$